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Attachment No. 1

ILLEGIB

NATIONAL COMMUNICATIONS SYSTEM

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ORIG COMP	33	OPI	33	TYPE	30
ORIG CLASS	C	PAGES	8	REV CLASS	C
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Report on the
National Communications System

On 11 July 1963, NSAM-252 was signed by Mr. McGeorge Bundy; Special Assistant to the President for National Security Affairs.

It specified that "a National Communications System shall be established by linking together, improving and extending on an evolutionary basis the communications facilities of the various Federal agencies" with the OBJECTIVE of providing necessary communications for the Federal Government under all conditions. It specified further that the NCS "will be developed and operated to be responsive to the needs of national command and user agencies and be capable of meeting priority requirements under emergency or war conditions." Initial emphasis in the development of the NCS is to be placed on meeting the needs for communications in the national security programs, particularly to overseas areas.

Although the NCS was not specifically defined, it was generally conceived that it would be comprised of the long-haul, point-to-point, trunk communication which could serve one or more agencies.

The organization set forth in NSAM-201 (ORRICK SUBCOMMITTEE) was superseded by NSAM-252 in which the President directed the following organizational arrangements relating to the establishment and operation of the NCS.

1. The Director of Telecommunications Management shall
 - a) Provide policy direction for the development and operation of the NCS.
 - b) Serve as Special Assistant to the President on Telecommunications.
2. The Special Assistant to the President on Telecommunications shall
 - a) Identify Presidential requirements.
 - b) Formulate and issue guidance on priority of requirements.
 - c) Monitor actions for compliance with guidance and policy.

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d) Ensure adequate planning to meet future needs of the NCS.

e) Advise the President on NCS regarding:

- Responsibilities of implementing and using Agencies.
- Requirements to be met.
- Guidance to the Executive Agent on design and operation.
- Adequacy of system designed.

/Since the position of Telecommunications Management was unfilled, Dr. Jerome Wiesner, Special Assistant to the President for Science and Technology was directed to perform the functions of Special Assistant on Telecommunications on an interim basis/.

3. The Secretary of Defense was designated as the EXECUTIVE AGENT for the NCS to design, for the President's approval, the NCS and to develop necessary plans for meeting the basic NCS objective.
4. Administrator of General Services shall continue to represent certain agencies in negotiations with commercial carriers and work with the Executive Agent in developing the Federal Telecommunications System as part of the NCS in accordance with approved plans and policies.
5. Bureau of the Budget will prescribe general guidelines and procedures for reviewing the financing of the NCS and for the preparation of budget estimates by participating agencies.
6. Other Agencies are directed to cooperate with and assist the Special Assistant, Executive Agent and GSA.

On 6 August the Secretary of Defense forwarded a letter to the Secretary of State, Administrator NASA, General Services Administrator, and Federal Aviation Administrator which

- 1) Designated the Director of DCA as the Manager for the NCS.
- 2) Appointed Mr. Solis Horowitz to the position of Assistant to the Secretary of Defense for NCS.
- and 3) Requested that each of the addressee agencies designate a full time representative to DCA to work with the Manager on NCS matters.

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Mr. Horowitz is to effect coordination with all agencies, review the progress being made and make recommendations to the SECDEF for improving efficiency, economy, and effectiveness of the NCS.

Enclosed with this letter was a copy of a SECDEF memorandum to the Manager of NCS assigning him 10 initial tasks designed to fulfill the NCS objective. These tasks are to be completed in the form of proposals or recommendations to the Executive Agent (SECDEF) and were assigned target dates for completion.

On 21 August 1963, McGeorge Bundy signed a memorandum to the "Heads of All Executive Departments and Agencies" on the subject of the Establishment of the National Communications System. This memorandum was essential to extend the coverage of the NSAM and the 6 August McNamara letter to all Federal Departments. It had three attachments:

- 1) Memorandum from the President - 21 August 1963 (sterilized NSAM-252).
- 2) Procedures and Working Relationships for the National Communications System - 21 August 1963.
- 3) Statement of Initial Tasks Assigned to the Manager NCS - 6 August 1963.

Although NSAM-252 and Secretary McNamara's letter established the ground rules and initiated DOD, GSA, NASA, FAA, [] and State into the NCS fraternity as charter members, Mr. Bundy's 21 August memorandum was the official White House announcement of NCS to the other Departments of the Federal Government and directed their cooperation in reaching the ultimate objectives of a National Communications System.

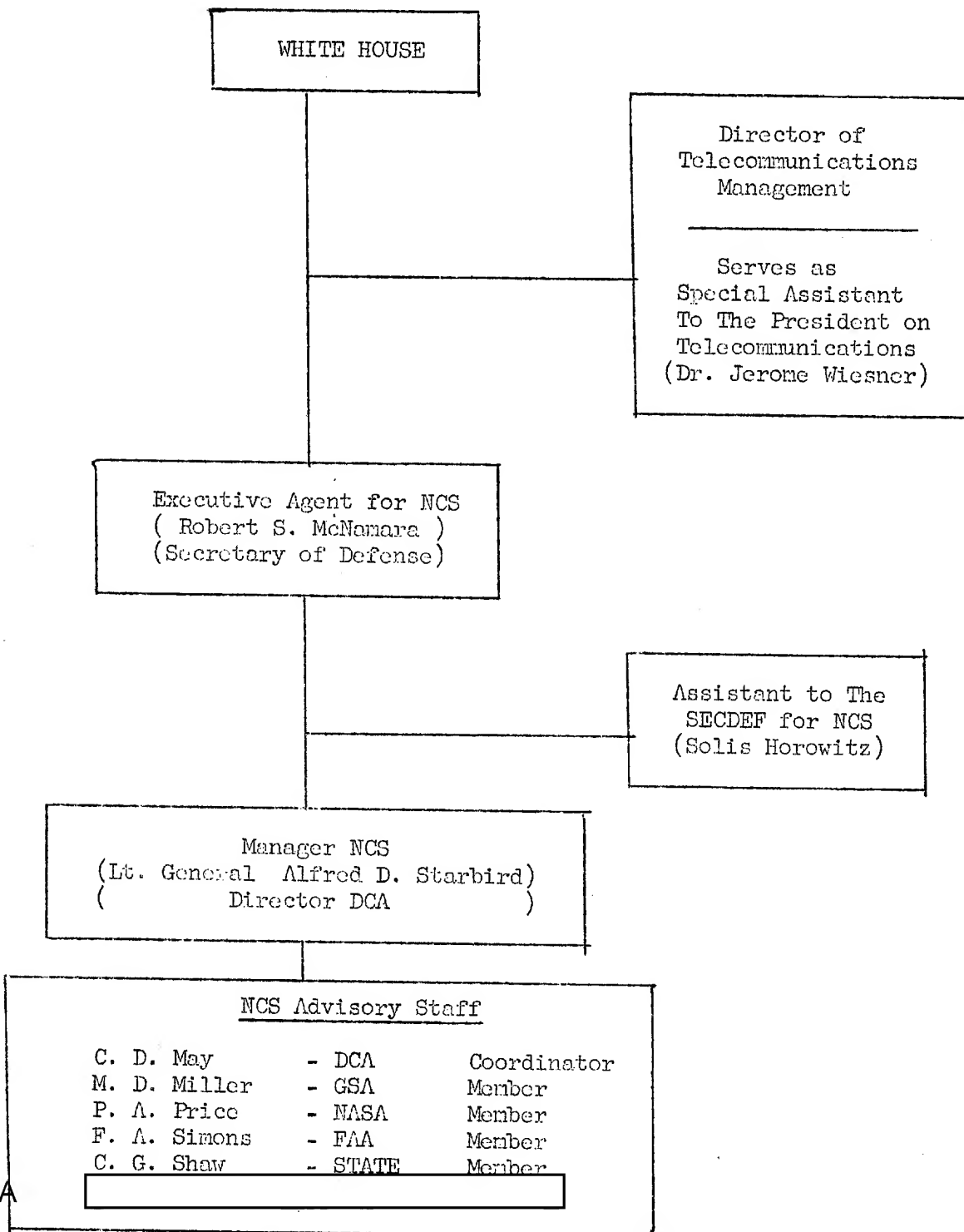
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Thus (with apology to []) we had a multiple wedding and a valid marriage license.

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National Communications System - Organization



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From an analysis of the Presidential Directive, the Manager, NCS, determined that there were two basic objectives the NCS must achieve-- both in the short and long range period.

- a) Ensuring that our most important national communications assets are devoted the most critical needs of survival in any national emergency, and
- b) Developing plans, programs, procedures, and organizational arrangements to ensure that NCS assets are progressively improved and linked together and operated so that they can effectively meet the day-to-day needs as well as those in any possible emergency situation.

In the first 90 days the work of NCS has been one of investigating and examining over-all communications assets, developing initial procedures and plotting courses to be followed to achieve the above objectives. During these 90 days, Tasks I, II, and III were completed.

TASK I & II - With input and assistance from the NCS operating agencies, the Manager, NCS, on 7 September 1963, forwarded his recommendations that some 15 military and 29 civil networks be identified as subsystem (assets) of the NCS and that agencies operating these subsystems continue to be responsible for their operation pending completion of the near term-FY-65-and long term plans. Since the identification of these systems included through to 30 June 1964, a projection of FY-64 programs was required.

Although NSAM-252 "conceived that the NCS would be comprised of long-haul, point-to-point trunk communications", the final [] decision was to submit for inclusion in the NCS all circuits that processed staff communications traffic. More appropriately, perhaps, we excluded all circuits which were in exclusive support of [] operations.

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This decision, of course, was made in full recognition of the possible impact on [] We were aware that, as an operating agency of the NCS, we would be subject to receiving various requirements as pertained to our system and that by including all our TRIB circuits in the NCS and having them defined therefore as "NCS ASSETS", we were extending the scope that these requirements could cover. For example, we could be requested to keep NCS informed on "circuit out" conditions on all our circuits so as to present in Washington a national picture of communications capability.

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TASK III - The emphasis placed by the Manager, NCS, on meeting requirements for emergency conditions was initially highlighted in the development of Task III - the allocation of circuits. Procedures

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were developed to meet requirements which were of the emergency, short-time variety as well as those which were required for day-to-day operations. In general, both requirements would be submitted to the operating agency responsible for providing the service, and if it could be met by them, the circuit would be provided. If not, the operating agency would forward the circuit requirement to the Manager who would look over his total resources to see how the service could be met. Formats were developed for the submission of these requirements although in an emergency, a phone call would be accepted. Washington Area points of contact were provided by the operating agencies for the acceptance of those emergency requirements. Overseas contact points were designated by the Department of Defense (DCA Regional Operations Centers). The plan also outlined the need for some management of these circuits. DOD (again DCA) procedures for both technical and operational control were submitted as examples of these management tools. The Manager, NCS, indicated that similar control procedures would be developed for the NCS.

Reflecting back to our Task I & II submissions - we recognize that particular attention will have to be given in the development of these procedures to limit the controls to trunk circuits. If they extend down to our tributary circuits it is conceivable that we could lose some of our operational control. Less important, perhaps, but of equal significance, we could be burdened with a reporting workload that would be formidable and necessitate additional personnel.

TASK IV - The near term FY-65 plan was completed on 7 November 1963. The essential problems addressed in this plan were:

- a. The examination of similar communications systems to see if unnecessary duplication existed and to determine if there would be problems of integration. Systems in this category were:
 1. DOD/FAA - essentially air traffic control
 2. DOD/GSA - digital switching
 3. DOD/FAA/WEATHER BUREAU - weather systems
 4. DOD/GSA - voice switching
 5. Secure voice switching
- b. The review of communications systems of Federal Agencies not initially included in the NCS (continuation of Tasks I & II).
- c. The status of incomplete ORRICK committee items.

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- d. The submission of the FY-65 programs of the NCS operating agencies. This was in the form of statements by the operating agencies of their FY-65 objectives in extremely broad terms with the primary purpose of recommending modifications or improvements to these programs which would require FY-65 budget adjustments.

In addition the near term outlined the procedures for submitting requirements by a using agency to the responsible operating agency for the annual long range plan - FY 66-69.

The problem of COMSEC was addressed but only in most general terms. The Manager, NCS indicated that COMSEC would be looked into in the development of the long term plan. He personally believes the guidance provided by NSA needs strengthening.



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Attachment No. 2

THE WHITE HOUSE

WASHINGTON

August 21, 1963

DOC	✓	REV DATE	22/09/80	BY	
ORIG COMP	706	OPI	33	FILE	02
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JUST		NEXT REV	WHITE HOUSE / NO ORJ	AUTH	HR 10-2

MEMORANDUM TO THE

HEADS OF ALL EXECUTIVE DEPARTMENTS AND AGENCIES

SUBJECT: Establishment of the National Communications System

The President has directed the establishment of a National Communications System (NCS) to provide better communications support to critical functions of government. Attachment 1 advises the Heads of Departments and Agencies of this action and designates the Director of Telecommunications Management as Special Assistant to the President for Telecommunications to advise and assist him with respect to communications requirements and plans for the NCS.

The President has further directed that on an interim basis his Special Assistant for Science and Technology shall perform the functions assigned to the Director of Telecommunications Management concerning the establishment of a National Communications System.

McGeorge Bundy

McGeorge Bundy

Attachments:

- 1 - Memorandum from the President--August 21, 1963
- 2 - Procedures and Working Relationships for the National Communications System--August 21, 1963
- 3 - Statement of Initial Tasks Assigned to the Manager of the National Communications System--August 6, 1963

ATTACHMENT 1

PRESIDENT'S MEMORANDUM

THE WHITE HOUSE

WASHINGTON

August 21, 1963

MEMORANDUM TO THE HEADS OF EXECUTIVE DEPARTMENTS
AND AGENCIES

SUBJECT: Establishment of the National Communications System

Concept and Objectives

In order to strengthen the communications support of all major functions of government there is need to establish a unified governmental communications system which will be called the National Communications System (NCS). It shall be established and developed by linking together, improving, and extending on an evolutionary basis the communications facilities and components of the various Federal agencies.

The objective of the NCS will be to provide necessary communications for the Federal Government under all conditions ranging from a normal situation to national emergencies and international crises, including nuclear attack. The system will be developed and operated to be responsive to the variety of needs of the national command and user agencies and be capable of meeting priority requirements under emergency or war conditions through use of reserve capacity and additional private facilities. The NCS will also provide the necessary combinations of hardness, mobility, and circuit redundancy to obtain survivability of essential communications in all circumstances.

Initial emphasis in developing the NCS will be on meeting the most critical needs for communications in national security programs, particularly to overseas areas. As rapidly as is consistent with meeting critical needs, other Government needs will be examined and satisfied, as warranted, in the context of the NCS. The extent and character of the system require careful consideration in light of the priorities of need, the benefits to be obtained, and the costs involved.

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Although no complete definition of the NCS can be made in advance of design studies and evolution in practice, it is generally conceived that the NCS would be comprised primarily of the long haul, point-to-point, trunk communications which can serve one or more agencies.

The President has directed the following organizational arrangements relating to the establishment and effective operation of the NCS.

Executive Office Responsibilities

In carrying out his functions pursuant to Executive Orders 10705 and 10995 and under this memorandum, the Director of Telecommunications Management shall be responsible for policy direction of the development and operation of a National Communications System. In this capacity, he shall also serve as a Special Assistant to the President for Telecommunications and shall:

- a. Advise with respect to communication requirements to be supplied through the NCS; the responsibilities of the agencies in implementing and utilizing the NCS; the guidance to be given to the Secretary of Defense as Executive Agent for the NCS with respect to the design and operation of the NCS; and the adequacy of system designs developed by the Executive Agent to provide, on a priority basis and under varying conditions of emergency, communications to the users of the NCS.
- b. Identify those requirements unique to the needs of the Presidency.
- c. Formulate and issue to the Executive Agent guidance as to the relative priorities of requirements.
- d. Exercise review and surveillance of actions to insure compliance with policy determinations and guidance.
- e. Ensure that there is adequate planning to meet future needs of the NCS.
- f. Assist the President with respect to his coordinating and other functions under the Communications Satellite Act of 1962 as may be specified by Executive Order or otherwise.

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In performing these functions, the Special Assistant to the President for Telecommunications will work closely with the Special Assistant to the President for National Security Affairs; he will consult with the Director of the Office of Science and Technology and the Director of the Bureau of the Budget, as appropriate; will establish arrangements for inter-agency consultation to ensure that the NCS will meet the essential needs of all Government agencies; and will be responsible for carrying on the work of the Subcommittee on Communications of the Executive Committee of the National Security Council which is hereby abolished. In addition to staff regularly assigned, he is authorized to arrange for the assignment of communications and other specialists from any agency by detail or temporary assignment.

The Bureau of the Budget, in consultation with the Special Assistant to the President for Telecommunications, the Executive Agent and the Administrator of General Services, will prescribe general guidelines and procedures for reviewing the financing of the NCS within the budgetary process and for preparation of budget estimates by the participating agencies.

Executive Agent Responsibilities

To obtain the benefits of unified technical planning and operations, a single Executive Agent for the NCS is necessary. The President has designated the Secretary of Defense to serve in this capacity. He shall:

a. Design, for the approval of the President, the NCS, taking into consideration the communication needs and resources of all Federal agencies.

b. Develop plans for fulfilling approved requirements and priority determinations, and recommend assignments of implementation responsibilities to user agencies.

c. Assist the user agencies and the General Services Administrator with respect to the Federal Telecommunications System to accomplish their respective undertakings in the development and operation of the system.

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d. Allocate, reallocate, and arrange for restoration of communications facilities to authorized users based on approved requirements and priorities.

e. Develop operational plans and provide operational guidance with respect to all elements of the NCS, including (1) the prescription of standards and practices as to operation, maintenance, and installation; (2) the maintenance of necessary records to ensure effective utilization of the NCS; (3) the request of assignments of radio frequencies for the NCS; (4) the monitoring of frequency utilization; and (5) the exercise and test of system effectiveness.

f. Within general policy guidance, carry on long range planning to ensure the NCS meets future Government needs, especially in the national security area, and conduct and coordinate research and development in support of the NCS to ensure that the NCS reflects advancements in the art of communications.

The Secretary of Defense may delegate these functions within the Department of Defense subject at all times to his direction, authority, and control. In carrying out his responsibilities for design, development and operation of the NCS, the Secretary will make appropriate arrangements for participation of staff of other agencies.

Responsibilities of the Administrator of General Services

The Federal Telecommunications System, established with the approval of the President under authority of the Federal Property and Administrative Services Act of 1949, as amended, to provide communications services to certain agencies in the Fifty States, the Commonwealth of Puerto Rico and the Virgin Islands, shall be a part of the NCS and shall be implemented and developed in accordance with approved plans and policies developed pursuant to this memorandum. The Executive Agent and the Administrator of General Services shall be responsible for establishing arrangements to avoid duplication in requests for cost, traffic, and other information needed from agencies served by the FTS.

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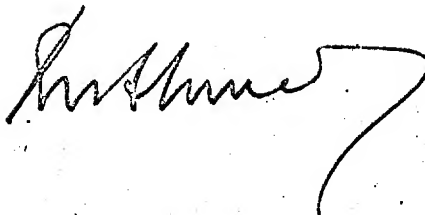
Nothing contained herein shall affect the responsibilities of the Administrator of General Services under the Federal Property and Administrative Services Act of 1949, as amended, with respect to the representation of agencies in negotiations with carriers and in proceedings before Federal and state regulatory bodies; prescription of policies and methods of procurement; and the procurement either directly or by delegation of authority to other agencies of public utility communications services.

Agency Responsibilities

All agencies are directed by the President to cooperate with and assist the Special Assistant to the President for Telecommunications, the Executive Agent, and the Administrator of General Services in the performance of the functions set forth above.

This memorandum shall be published in the Federal Register.

THE WHITE HOUSE



ATTACHMENT 2

PROCEDURES & WORKING RELATIONSHIPS

Attachment: Initial Tasks

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21 August 1963

PROCEDURES AND WORKING RELATIONSHIPS FOR THE NCS

Reference: Memorandum to the Heads of Executive Departments and Agencies, 21 August 1963, Subject: Establishment of the National Communications System

1. This memorandum outlines procedures and working relationships to apply initially in implementing the National Communications System (NCS) as established by referenced memorandum. Like the NCS itself, the relationships and procedures must be evolutionary. These procedures, taken together with the reference are designed to guide and assist the Agencies in planning their participation in the NCS.

SPECIAL ASSISTANT TO THE PRESIDENT FOR TELECOMMUNICATIONS

2. Pending the appointment of a Director of Telecommunications Management, who, as provided in referenced memorandum, shall also serve as Special Assistant to the President for Telecommunications, Dr. Jerome B. Wiesner has been designated to perform on an interim basis the functions pertaining to the NCS assigned to the Special Assistant.

STAFF SUPPORT TO THE EXECUTIVE AGENT

3. To aid him in discharging his responsibilities the Executive Agent has established the following administrative arrangements:

- a. ~~Assistant to the Executive Agent for NCS.~~ The Executive Agent has designated Mr. Solis Horwitz as his Assistant for the NCS. He has given Mr. Horwitz responsibility for receiving and processing requirements from Agencies served by the NCS, for reviewing progress being made in attaining the objectives of the NCS, making recommendations to the Executive Agent on tasks to

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be assigned and on other matters as appropriate.

b. Manager, NCS. The Executive Agent has given the Director, DCA, additional responsibility as Manager, NCS. In this capacity he will employ the DCA staff and call upon other Agencies and upon elements of DOD as necessary for the accomplishment of tasks assigned by the Executive Agent, work in close coordination with the representatives of Agencies with regard to assigned tasks, and inform Agencies of actions recommended which affect their requirements or affect the subsystems or elements of the NCS for which they are assigned responsibility.

c. Representatives of Other NCS Government Agencies. GSA, ~~State~~, FAA, and NASA have each been requested to designate a responsible individual to serve full time as its representative to the NCS Executive Agent and to work with the Manager, NCS. Such representatives shall be the primary point of contact between their Agencies and the Executive Agent's staff in the DOD. Other Agencies have been requested to designate a point of contact for dealing with the Executive Agent on matters pertaining to the NCS.

DEFINITION OF AND PLANNING THE ESTABLISHMENT AND IMPROVEMENT OF THE NCS

4. The Executive Agent is responsible for designing the NCS for the approval of the President, developing plans for fulfilling approved requirements and priority determinations, and recommending implementation responsibilities. To accomplish his responsibilities, the Executive Agent has directed the Manager, NCS, to undertake the following tasks in coordination with the other interested Agencies:

a. Definition of NCS. Prepare for the Executive Agent to submit to the President by 15 September 1963, recommendations identifying those communications assets which should be included now in the NCS and additions which should be considered for possible later incorporation.

b. Operating Responsibilities. Prepare for the Executive Agent to submit to the President, simultaneously with the NCS definition, recommendations as to which Government Department or Agency

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should have responsibility for installation, operation, maintenance, and modification of NCS assets identified in a. above, including responsibility for budgeting and funding.

c. Initial Plan. Prepare for the Executive Agent to submit to the President by 1 November 1963 a near-term plan setting forth initial objectives to be achieved and requirements to be met by the NCS, and recommending modifications or improvements affecting the FY 1965 budget. During the preparation of the plan all proposals for modifications and improvements will be examined within the overall NCS context and, as appropriate, incorporated in the plan. For those proposals not incorporated in the plan, the Executive Agent will submit to the President the reasons for the recommendation along with any differing view of the affected agency.

d. Annual Long-Range Plan. Prepare for the Executive Agent to submit to the President by 1 April 1964, and annually on that date thereafter, a Long-Range Plan (covering the forthcoming FY and four FY's thereafter) updating objectives and requirements to be met by the NCS, identifying requirements not fully met and recommending further modification and improvement as necessary. Where appropriate, the Long-Range Plan will present and cost alternative ways of satisfying user requirements. Issues of policy and differences of views between agencies will be identified. During the preparation of the Long-Range Plan, all proposals for modification and improvement will be examined and appropriate proposals will be incorporated in the plan. In addition, the plan will recommend any appropriate changes in the assets to be included in the NCS and in assignment of responsibility to the Agencies. For proposals not recommended for inclusion in the plan or for other controversial aspects, the Executive Agent will submit his views to the President along with the differing views of the other Agencies.

5. ~~By 1 October 1963~~ and annually thereafter on 1 January, the Special Assistant to the President will furnish to the Executive Agent any communications requirements on the NCS unique to the Presidency so that these requirements can be reflected in NCS plans prepared by the Executive Agent.

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REVIEW AND APPROVAL OF REQUIREMENTS

6. The Special Assistant to the President has responsibility for advising the President with regard to communications requirements to be supplied by the NCS, responsibilities of Agencies in implementing and utilizing the NCS, the guidance to be given to the Executive Agent with regard to design and operation, and the adequacy of system designs developed by the Executive Agent. He is charged also with formulating and issuing to the Executive Agent guidance as to relative priority of requirements and with insuring that there is adequate planning to meet future needs of the NCS.

7. To assist the Special Assistant to the President and the President in the review and approval of communications requirements to be satisfied by the NCS, the following procedures are established:

a. Certain Agencies, such as DOD, GSA, FAA, NASA and State, will be assigned responsibilities for operating, and budgeting and funding for specific components of the NCS and for meeting specific requirements of the NCS as indicated in paragraph 4b of this document. The processing of NCS requirements and the preparation of plans to meet these requirements will be accomplished in the following manner:

(1) Agencies having requirements for service within the NCS will submit their requirements by 1 December to the operating agency designated as responsible for providing the required service.

(2) Agencies operating components of the NCS will consolidate their own requirements for their components of the NCS and those of the other Agencies for which they are responsible for providing service. The consolidated requirements, together with the proposed plan for meeting the requirements, will be submitted to the Executive Agent by 1 January. Such operating agencies will include initially the DOD, GSA, FAA, NASA and the State Department.

(3) The Director, Office of Emergency Planning, will submit his requirements for communications support including

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the Agency relocation centers (ARC) to the Executive Agent by 1 January.

(4) All civil agencies having CONUS requirements for service from the NCS, except where covered in (2) and (3) above, will submit these to the Executive Agent through the Administrator of General Services, for his comment as to the appropriateness of meeting the need through the Federal Telecommunications System (FTS) component of the NCS. If considered appropriate by the Administrator of General Services, the necessary capability will be incorporated in his plan submitted in accordance with (2) above.

(5) The form for submission of requirements, and of plans for fulfillment, will be prescribed by the Executive Agent.

(6) The Executive Agent will transmit, for advanced information, one set of Agencies' submissions to the Special Assistant.

b. Procedures for meeting requirements associated with the day-to-day operations within the NCS will be promulgated by the Executive Agent.

c. Subject to any guidance from the Special Assistant to the President as to relative priority of requirements, the Executive Agent will examine the Agencies' statements of requirements and proposals for modifications and improvements to the NCS and, based upon his review, integrate these, as appropriate, into the consolidated statement of requirements and NCS Long-Range Plan for submission to the President.

d. The Special Assistant to the President will review the Initial and Long-Range Plans, which include the statement of Agency requirements, the plans for meeting these requirements, and policy matters, and will make appropriate recommendations to the President. The plans and requirements, as approved by the President, will constitute the basis for implementation of the NCS.

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e. The NCS Operating Agencies (initially DOD, GSA, FAA, NASA, and State) will include in their programs and budgets the necessary funds to carry out their specific NCS responsibilities under the approved plans. These will be subject to the normal budgetary review process.

CHANGES IN APPROVED PLANS AND REQUIREMENTS

8. Requirements and plans will be subject to modification to meet changing conditions between planning cycles. Responsibility for meeting the changed circumstances and requirements lies with the NCS Operating Agencies, where such changes do not involve significant departure from approved NCS objectives or plans. However,

a. Where a change may affect adversely any Agency's capability to carry out assigned responsibilities or to meet requirements under the approved plans, the Agency will immediately inform the Executive Agent and submit to the Executive Agent any recommended corrective action. The Executive Agent will consider the recommended corrective action and other alternatives and will take action as appropriate.

b. Where an agency requires assistance or service from the NCS not provided for in approved plans, it will transmit the requirement to the Executive Agent. If the Executive Agent considers the requirement to be valid and that it can be met from existing NCS resources, he will approve the provision of such assistance or service after concurrence of the operating agency concerned. The Executive Agent will inform the Special Assistant of any such approvals which depart significantly from approved requirements or plans for the NCS. In case of disagreement between the agency and the Executive Agent as to validity, the matter will be referred to the President. Should provision of such assistance or service not be possible within existing NCS resources, a plan for provision of the additional resources will be developed by the Executive Agent who will make recommendation to the President as appropriate.

c. Major changes in the definition of the NCS, major changes in the assignment of Agency responsibilities and significant issues of policy will be submitted by the Executive Agent to the President for his approval.

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INITIAL TASKS TO BE PERFORMED

9. The Executive Agent has directed the Manager, NCS, to accomplish the tasks outlined in paragraph 4 above as well as certain other initial tasks, as described in the attachment.

Attachment:

Statement of Initial Tasks for the National
Communications System (NCS)

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ATTACHMENT

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Statement of Initial Tasks for the National
Communications System (NCS)

The following ten tasks pertaining to the NCS have been assigned to the Manager, NCS, by the Secretary of Defense in his capacity as Executive Agent, NCS:

a. Task 1. Prepare recommendations for submission by me to the President identifying those national governmental communications assets which should be included now in the NCS as subsystems or components of the NCS and additions which should be considered for later incorporation. Target date - 6 September 1963.

b. Task 2. Prepare simultaneously recommendations for me regarding which Government Department or Agency should have responsibility for installation, operation, maintenance, modification (including budgeting and funding responsibility) of each subsystem or component identified in a. above. Target date - 6 September 1963.

c. Task 3. Prepare proposals for organizational arrangements and necessary procedures for the NCS which will accomplish effective allocation, reallocation, and arranging for restoral of circuits and channels and other assets of the NCS to authorized users based on approved requirements and priorities. Target date - 7 October 1963.

d. Task 4. Prepare a near-term plan for FY 1965 budget guidance and later a long-range plan, recommending objectives, modification and improvement in the NCS as necessary to provide communications for the Federal Government

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under all conditions ranging from normal situations to international crises and national emergencies, including nuclear attack. Target date for completion of the initial near-term plan is 1 November 1963 and for the initial long-range plan is 1 April 1964.

e. Task 5. Prepare and issue operational guidance which will prescribe the standards and practices governing operation, maintenance and installation of the NCS. Such guidance will include provisions for the maintenance of necessary records to insure effective utilization of NCS resources. Target date for an initial report on accomplishment - 2 December 1963.

f. Task 6. Prepare for my consideration a plan to accomplish assignment of radio frequencies for the NCS and for monitoring radio frequency utilization. Target date - 4 November 1963.

g. Task 7. Prepare for my approval a plan for the exercise and test of NCS effectiveness. Target date for the accomplishment - 2 December 1963.

h. Task 8. Prepare proposals for establishing a realistic priority system to govern reallocating and restoring of circuitry and other assets of the NCS so as best to meet National Government needs in time of an emergency. Target date - 2 December 1963.

i. Task 9. Prepare for my approval a plan and recommend a structure for carrying out research and development essential to the progressive improvement of the NCS. Target date - 2 December 1963.

j. Task 10. Prepare and submit recommended revisions as necessary in organization structure, manpower needs and financial requirements for you to accomplish your responsibilities, this to be based on early consultation and coordination with the Designated Representatives of other operating agencies. Target date - 15 September 1963.

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DESCRIPTION OF THE NATIONAL GOVERNMENTAL
COMMUNICATIONS ASSETS RECOMMENDED FOR INITIAL INCORPORATION
IN THE NCS AND THOSE TO BE CONSIDERED FOR POSSIBLE LATER
INCORPORATION

Appendices A, B, C, D and E contain the descriptions of those national governmental communications assets which are recommended to be included now in the NCS and designate the agencies recommended to be initially responsible for the installation, operation, maintenance and modification (including budgeting and funding) of the listed NCS assets.

Appendices F and G contain the descriptions of those national governmental communications assets which are recommended for consideration for possible later incorporation in the NCS.

APPENDIX A - DOD Operated Networks/Systems

APPENDIX B - GSA Operated Networks/Systems

APPENDIX C - FAA Operated Networks/Systems

APPENDIX D - State Operated Networks/Systems

APPENDIX E - NASA Operated Networks/Systems

APPENDIX F - Future Consideration - DOD

APPENDIX G - Future Consideration - Civil Agencies

Document No.
 Review of this document by CIA has
 determined that

- ☐ CIA has no objection to disclose
☐ It contains information of CIA
 interest that must remain
 classified at TS S
 Authority: HR 10-2

☐ It contains nothing of CIA
 interest

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APPENDIX A

DEPARTMENT OF DEFENSE
DEFENSE COMMUNICATIONS SYSTEM

Responsibility: DOD as the operating agency of the NCS assets, identified below, is the responsible agency for the planning, installation, operation, maintenance and budgeting therefor.

DEFENSE COMMUNICATIONS SYSTEM (DCS) (less assets for future consideration identified in Appendix F) - The DCS is the world-wide complex of DOD communications networks, equipments, control centers, operating personnel, installations, and other related activities, facilities and resources organized into a single, compatible, long-haul, point-to-point communications system. The DCS includes all world-wide, long-haul, government-owned and leased, point-to-point circuits, trunks, terminals, switching centers, control facilities and tributaries required to provide communications: from the President, to and between the Secretary of Defense, the Joint Chiefs of Staff and other government agencies as directed; from the Secretary of Defense and the Joint Chiefs of Staff, to and between the Military Departments and the Unified and Specified Commands; from the Military Departments to and between their major and subordinate commands, as directed; from the Unified and Specified Commands to and between their component and other subordinate commands, as directed; and from any of the above to allied commands when and as directed. The DCS does not include: tactical communications which are self-contained within tactical organizations; self-contained information gathering, transmitting and/or processing facilities which are normally local in operation and use; land, ship and airborne terminal facilities of broadcast, ship-to-ship, ship-to-shore, and ground-air-ground systems; intra-site communications for command, count-down, range safety, and weapon destruct at missile and air defense launch and firing complexes. DCS circuits operated by Army, Navy and Air Force are shown in DOD Charts 1, 2 and 3 of Enclosure 2.

ALASKA COMMUNICATION SYSTEM - A system of cable, landline, and radio circuits providing data, voice, teletype, and graphic service within Alaska and between Alaska and the CONUS. See DOD Chart 4 of Enclosure 2.

ATLANTIC MISSILE RANGE - A system of cable and radio circuits providing voice, data, and teletype service for the control and tracking of missiles. See DOD Chart 5 of Enclosure 2.

AUTODIN - An automatic digital switching system designed to handle digital data and message traffic in a secure or non-secure mode. Currently in operation in CONUS are five modern automatic digital message and circuit switches. These switches are located at Norton AFB, McClellan AFB, Gentile AFB, Tinker AFB, and Andrews AFB. See DOD Chart 6 of Enclosure 2. Additional switches are planned for CONUS and overseas in FY-64.

AUTOVON - A limited network in CONUS, employing four analog switches and supporting transmission media leased by Department of Army for the Switched Circuit Automatic Network (SCAN). See DOD Chart 7 of Enclosure 2. CONUS expansion and overseas additions are planned for FY-64.

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DCS COMNET - The DCS Teletypewriter Network is a world-wide complex of landline and radio circuits interconnected by tape relay centers for the common use of connected tributary stations serving elements of the DOD. The general purpose of the network is to exchange official messages among authorized users on any general subject of military operations. It is by far the largest element of the DCS. See DOD Chart 8 and Chart 14a of Enclosure 2.

DCS EUROPEAN AREA TROPO/MICROWAVE - The DCS portion of those systems which provide communications to the U. S. installations in Germany and France as well as connection from the United Kingdom direct to Spain and to Italy from Germany. Tropo and the DCS allocations in the Joint-European Radio Relay Network provide the main long-haul trunk system with microwave connections to the local installations. See DOD Chart 9 of Enclosure 2.

NACOM II - NACOM II is a high frequency radio network using single sideband voice and teletypewriter circuits. It provides an emergency backup to OCD networks and is controlled from OCD regional communication centers. See DOD Chart 10 of Enclosure 2.

NAWAS - NAWAS is the federal portion of the over-all OCD Civil Defense Warning System. It consists of full period, private line voice circuits and interconnects 8 OCD warning centers located at NORAD Headquarters and various NORAD installations, OCD Headquarters relocation site and 8 OCD regional offices. (The Federal System is interconnected to 508 state and local warning points.) See DOD Chart 11 of Enclosure 2.

PACIFIC SCATTER SYSTEM EXTENSION - (JAPAN-OKINAWA-KOREA) - A system of tropospheric scatter links which extends the Pacific Scatter System from Okinawa to Japan and Korea. The system consists of 60 voice channels from Okinawa to Itazuki, Japan, to Korea; 120 voice channels from Itazuki to Tokyo; 60 channels from Tokyo to Chitose and 24 channels from Chitose to Wakkanai. See DOD Chart 12 of Enclosure 2.

UNITED KINGDOM RADIO RELAY - A 120 voice channel microwave system capable of expansions to 240 channels. Provides communications service for United States Forces in England, interconnection for the England-Iceland NARS trunks at Fylingsdale, England; the England-Spain FPTS trunks at Ringstead, England; and England-Germany FPTS trunks at Martlesham Heath, England; and the Joint-European Radio Relay Network at Longfosse, France. See DOD Chart 13 of Enclosure 2.

CRITICOMM - The Critical Intelligence Communications Network is a world-wide, cryptographically secured system under the operational direction of the National Security Agency. It is designed for the rapid collection of intelligence information. See Chart 14 of Enclosure 2.

WASHINGTON AREA COMPLEX -

PRESIDENTIAL COMMUNICATIONS - Those special communication facilities and services to support the President in his capacity as Chief of State and Commander in Chief of the Armed Forces of the United States. The presidential communications include land, sea and air environments and are focused on the Washington area where special permanent facilities are established.

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NATIONAL COMMAND SYSTEM COMPLEX - Communications and services in support of the NMCS include those communications facilities with appropriate security features to connect the NMCC and its fixed and mobile alternates to (a) each other, (b) the command centers and their alternates of unified and specified commands, (c) the service Headquarters Command Centers and their alternates, (d) other designated agencies which support the NMCS and (e) the National Command authorities. Survivable communications are required to interconnect the fixed and mobile alternates of the NMCC to the designated commanders and agencies commensurate with the survivability of each terminal.

INTERAGENCY COMMUNICATIONS SYSTEM - This is a standby system designed to interconnect specified Federal Government agencies under emergency conditions. The system is under the management and operational control of the DCA. It utilizes special leased trunks and terminal equipment to provide the necessary voice, record and visual facilities to conduct essential National Government business under emergency (including wartime) conditions. This system supports the Federal Continuity of Government Program, and has interconnect with other governmental and commercial systems.

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APPENDIX B

GENERAL SERVICES ADMINISTRATION
FEDERAL TELECOMMUNICATIONS SYSTEM

Responsibility: General Services Administration as the operating agency of the NCS assets identified below is the responsible agency for the planning, installation, modification, operation, maintenance, and budgeting therefor.

FEDERAL TELECOMMUNICATIONS SYSTEM (FTS) (less exclusions identified separately) - The FTS is a nationwide (including Alaska, Hawaii, Puerto Rico, and the Virgin Islands) complex of communications networks, equipments, control centers, operating personnel, installations, and other related activities, facilities and resources serving certain civil departments and agencies of the Government, organized into a single, compatible, long-haul, point-to-point communications system. The FTS includes certain nationwide, long-haul, Government-owned and leased, point-to-point circuits, trunks, terminals, switching centers, control facilities, and tributaries required to provide communications between the Heads of Civil Departments and agencies; from the Heads of certain Civil Departments and agencies to and between their regional and field activities at their normal locations and at their emergency relocation sites; and to and between the operating elements of the various civil agencies. The FTS assets listed do not include certain communications assets such as local communications systems which are self-contained such as closed circuit audio and video systems for bio-medical research, supervision of penal institutions, local mobile radio systems used by law enforcement activities, fire-fighting, mountain rescue work, the scientific and missile tracking networks of the National Aeronautics and Space Administration; and the operational networks and leased communications services used in support of the navigation and control of air traffic of the Federal Aviation Agency which have been excluded. FTS facilities and the agency which operates them are shown in GSA Charts 1 - 4.

FTS VOICE GRADE CIRCUIT SWITCH NETWORK - The FTS leased voice grade network is designed to serve as the common user circuit switching network for Government use. Where economical, WATS circuits are employed, and system has access to public message networks of common carriers. System carries any traffic suitable to switched circuits including data and facsimile. Intercity switching center trunks, intercity connecting and access trunks, direct trunks to Washington, D. C. and other high usage points are depicted on Charts 1, 2 and 3 of Enclosure 2.

FTS TELETYPEWRITER MESSAGE SWITCHING NETWORK - The leased FTS teletypewriter message switching network is designed to serve as the common user message switching network for Federal Government use. Administrative traffic is carried by this system for the government activities listed in the directory of authorized users of GSA teletypewriter facilities and refile services, GSA Publication, GSA-Washington, D. C. 63-2973 dated September 1, 1962. See Chart 4 of Enclosure 2.

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APPENDIX C

FEDERAL AVIATION AGENCY

Responsibility: The Federal Aviation Agency as the operating Agency of the NCS assets identified below is the responsible Agency for the planning, installation, operational, maintenance and budgeting therefor.

AERONAUTICAL MESSAGE CIRCUITS (SERVICE B) - Lengthy messages pertaining to control of Instrument Flight Rules (IFR) air traffic are exchanged via teletypewriter circuits (Service B). Information concerning the movement of air traffic operating under Visual Flight Rules (VFR) is exchanged between facilities on Service B teletypewriter circuits. Operating speed except as noted, is 100 words per minute (74.23 bauds). Relay, terminal printing and reperforating equipments are FAA-owned while all lines are leased from communications common carriers. See FAA Chart 1 of Enclosure 2.

METEOROLOGICAL DATA SYSTEMS (SERVICES A, C AND O) are comprised of three major networks which are used for the dissemination of basic and operational meteorological and Notice to Airmen information. Each system is self contained and is designed to handle a specific type of weather data. Relay and terminal printing or reperforating equipments in FAA and U.S. Weather Bureau facilities are FAA-owned, while lines are leased and non-government subscribers generally lease their receiving-only printers from the communications common carriers. See FAA Charts 2, 3 and 4 of Enclosure 2.

SERVICE A DATA INTERCHANGE SYSTEM (ADIS) - Interconnecting all of the Service A area and supplemental circuits is an 857 WPM (600 baud, 3 KC bandwidth) data interchange circuit of about 10,550 miles. The Data Interchange System consists of five Data Interchange Centers; each one collects from and relays to three area and three supplemental circuits. In addition, there are thirty ADIS send/receive centers serving all U.S. Weather Bureau Flight Advisory Weather Service (FAWS) office plus a few selected Weather Bureau Airport Stations (WBAS). See FAA Chart 5 of Enclosure 2.

AIR TRAFFIC CONTROL INTERPHONE (SERVICE F) - To effectively control air traffic and provide safe separation between flights operating on Instrument Flight Rules (IFR), adequate, rapid and reliable voice communications are required from each Air Route Traffic Control Center to each aeronautical facility (Flight Service Stations, Civil and Military Airport Control Towers and Approach Control Facilities, Air Carrier Offices, Military Operations Offices, RAPCON's, RATCC's, air-ground communications facilities, search and rescue organizations) within its area of responsibility which exchanges ATC information. Additionally, each ARTC Center must have voice communications with adjacent centers to coordinate the movement of IFR aircraft from one center to another. Approach control facilities which provide enroute air traffic control service are, like ARTC Centers, interconnected to coordinate transfer of control. See FAA Chart 6 of Enclosure 2.

COMMUNICATIONS CONTROL CIRCUITS (SERVICE P) - All FAA air navigation aids and radio communication facilities are monitored and controlled from sites other than the transmitter facility itself. Control lines range in length from one or two miles up to several hundred miles. Circuits are used between the operating location and remote locations for keying and control of equipment and for monitoring its operating status. See FAA Chart 7 of Enclosure 2.

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INTERNATIONAL FLIGHT SERVICE - FAA's 11 International Flight Service Stations (IFSS's) and the radio communications trunks interconnecting them with each other or with foreign-operated facilities have been established primarily to meet United States commitments under the Chicago Convention which established the International Civil Aviation Organization (ICAO). Communications planning for these facilities is generally done at ICAO Regional Meetings and changes to the ICAO Regional Plan usually require international coordination and agreement. The dearth of reliable and adequate landline or cable facilities (up to the recent time) and the high cost of common carrier leased communications has dictated the need to establish FAA owned radio trunks in the majority of cases. The standards and recommended practices governing the establishment and operation of such trunks are contained in the various Annexes to the Chicago Convention, particularly Annex 10 (Telecommunications). In addition to ICAO planning, FAA radio trunks are used to meet U. S. commitments to the World Meteorological Organization (WMO) for the exchange of weather data on a world-wide basis. See FAA Chart 8 of Enclosure 2.

ALASKAN REGION FIXED AERONAUTICAL NETWORK - This network serves two purposes; one, for the point-to-point relay of weather and air traffic data in the event of failure of other communications media and secondly, for voice contact with aircraft flying in the mountainous terrain of the State of Alaska. It operates in the HF portion of the radio spectrum. See FAA Chart 9 of Enclosure 2.

FAA-ALASKA TTY SERVICE A, B, C AND O - These networks are used for the dissemination of basic and operational meteorological data, notice to airmen traffic, IFR and VFR flight control information. Circuitry is provided by DCS allocated channels. See FAA Chart 10 of Enclosure 2.

APPENDIX E

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Responsibility: The National Aeronautics and Space Administration (NASA) as the operating agency of the NCS assets, identified below, is the responsible agency for the planning, installation, operation, maintenance, and budgeting therefor.

The NASA Communications Network (NASCOM) is a separate self-contained system within the NCS which provides for the exchange of operational information between the project operations centers, launch centers, scientific support centers, and tracking and data acquisition centers. Circuits in this network are installed under a mission dedicated concept where, during operating periods, the circuits are configured to provide continuous connection between the project operations center and the supporting stations. During non-mission periods, the circuits are arranged for common use by all projects. This network is composed of both domestic and overseas voice, teletype and data nets.

NASA DOMESTIC AND OVERSEAS OPERATIONAL VOICE SYSTEM - The NASA overseas operational voice network is centered on a Switching, Conferencing, and Monitoring Arrangement (SCAMA) at Goddard Space Flight Center. This allows central facility control and provides the switching/conferencing capability required to establish mission networks as well as continuous switching functions during missions. When a mission network has been established, the project operations center may contact any network station directly. During non-mission periods, all circuits are controlled by the SCAMA board operator to provide common use for all projects. The existing SCAMA board will be replaced by a larger capacity unit in the second quarter of fiscal year 1964. The new equipment will provide selective signalling to stations as required, and during mission periods, the operations centers will be given through signalling capabilities. All circuits in this network are four-wire data conditioned lines and, through facility control patching, can be used as either voice or data circuits. Interface with this network must be through the SCAMA board at GSFC. Each interface two-wire line must be equipped with two to four-wire conversion and echo suppression equipment to prevent degradation of the system. See NASA Chart 1 of Enclosure 2.

NASA OVERSEAS OPERATIONAL TELETYPE NETWORK - The NASA overseas operational teletype network is used in support of the Space Tracking and Data Acquisition Network, Deep Space Instrumentation Facility and Manned Space stations. All circuits in this network are routed through automatic switching and sequencing equipment at Goddard Space Flight Center. Present switching equipment at GSFC is electro mechanical but will be replaced by solid state switching and processing equipment in the third quarter of fiscal year 1964. Sub switching centers have been established at London, England; Honolulu, Hawaii; and Adelaide, Australia, to allow circuit sharing. All sub switching centers will be equipped with solid state switching and processing equipment in fiscal year 1965. Entrance to this network will be through the GSFC switching arrangement on either specially provided interface circuits or on a refil basis. See NASA Chart 2 of Enclosure 2.

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FACSIMILE/DATA NETWORK - The high speed facsimile/data network is an independent subsystem in the NCS operated by NASA. It presently consists of a four-wire automatic tandem switch located in New Orleans and connects approximately 48 stations together on a full period basis. The switching system is capable of switching analog data up to a bandwidth of 16 KCS. The facsimile terminal equipment is operating at a scan rate of 360 RPM. Terminal equipments now include the IBM 065 transceivers and 7702 tape transports. Digitalized data terminal equipment is used on an alternate basis. The system employs full duplex lines in order to provide a return signal for parity check. This arrangement limits the transmission of data to half-duplex between any two stations. There is no special interface equipment required to connect to other NCS facsimile circuits. An identical tandem switch is planned to be established at the NASA Western Operations Office at Santa Monica, California to handle the West Coast location. Both switches will be interconnected to reduce the number of point-to-point circuits, to effect greater economies, and to permit greater system flexibility. The switching arrangement provides an unrestricted exchange capability between terminals. All stations have a dial telephone control set to provide for station connection and voice coordination. They also contain a local switching arrangement to connect selected terminal equipment. In addition to those stations connected to the tandem switch are many point-to-point circuits. These were established prior to the switched network and utilize various types of end equipment. With the establishment of the tandem switch on the West Coast, these equipments will be standardized and integrated into the network. It is planned to transfer the administrative communications of the net to the Federal Telecommunications System (FTS) when the capability exists.

ADMINISTRATIVE TELEPHONE - The Administrative Telephone Network is that portion of the NCS which consists of telephone exchanges at all NASA centers, connected with outside telephone lines in order that long distance calls may be made. It also contains some tie-line circuits. In order to permit NASA centers in the Washington, D. C. area to have access to all government agencies in the area, Langley Research Center, Wallops Station, Goddard Space Flight Center, and the Headquarters were connected into the GSA Interdepartmental Dial System. All NASA centers are being integrated into the FTS to handle administrative telephone traffic. All PBX equipments are being modified to permit direct in-out dialing by the end of Fiscal Year 1964. See NASA Chart 4 of Enclosure 2.

CRYPTO-TTY NETWORK - The crypto network, as a subsystem of the NCS, provides for transmission and reception of encrypted teletypewriter messages at each NASA center. The Western Operations Office; MSC, Houston; MSFC, Huntsville; and NASA Headquarters in Washington, D. C., operate KW-26 equipment. KW-26 equipment is planned for Michoud Operations, New Orleans JPL and Pacific Launch Operations, California operate 131B equipment and all other planned or operating stations utilize KW-9 equipment. It is planned to transfer the administrative communications of this net to the FTS when the capability exists. See NASA Chart 5 of Enclosure 2.

NASA DOMESTIC OPERATIONAL TELETYPE SYSTEM - The NASA domestic operational teletype system is divided into two networks. One network provides communications for the Space Tracking and Data Acquisition Network, Deep Space Instrumentation Facility and Manned Spaceflight stations. All circuits in this network route

through the GSFC switching equipment and, therefore, have automatic access to the NASA overseas operational teletype system during mission periods. In the third quarter of fiscal year 1964, the existing electro mechanical switching equipment at GSFC will be replaced by solid state switching and processing equipment. Entrance to this network is through the GSFC switching equipment on either specially provided interface circuits or on a refile basis. The other operational domestic teletype network provides communications between NASA Headquarters, NASA Centers, Research and Development Offices, test facilities and launch facilities. The purpose of this network is to provide rapid dissemination of information on test results, engineering changes and research information between the widely separated mission support agencies and the project support centers. Switching centers are located at NASA Headquarters, Washington, D. C.; Marshall Space Flight Center, Huntsville, Alabama; and Western Operations Office, Santa Monica, California; trunk lines are provided between switching centers. Lines are also provided between NASA Headquarters, and GSFC for entrance into the Space Tracking Network. It is planned to transfer the administrative communications of this net to the FTS when the capability exists. See NASA Chart 6 of Enclosure 2.

NASA SPECIALIZED DATA NETWORK - The NASA specialized data network is a self-contained system within the NCS. This system is used to transmit wide-band data on a real time basis in support of the pre-launch, lift off, post launch and orbit insertion functions of spaceflight. These circuits terminate in computers at both ends where error detection and correction techniques are employed to ensure the high degree of accuracy necessary to achieve a proper orbit. In the case of manned spaceflight, the decision to continue or abort the mission after lift-off is dependent on the calculations made by this system. After orbit has been achieved, the system is used to transmit data between the spacecraft and the mission control center. Because these circuits are direct computer to computer, entrance to this network must be through the control center at Goddard Space Flight Center and will require pre-engineered interface equipment. The data format must be compatible with those the computer has been programmed to recognize. It is planned to transfer the administrative communications of this net to the FTS when the capability exists. See NASA Chart 3 of Enclosure 2.

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APPENDIX F

DESCRIPTION OF NATIONAL GOVERNMENTAL COMMUNICATIONSASSETS WHICH ARE RECOMMENDED FOR CONSIDERATION FOR POSSIBLE
LATER INCORPORATION IN THE NCS

The national governmental communications assets described below are recommended for consideration for possible later incorporation in the NCS. See Future Consideration section of Enclosure 2 for charts depicting the assets described in this Appendix. Generally, these assets fit within the broad criteria of NSAM-252, however they are not recommended for inclusion at this time in the NCS for one or more of the following reasons:

- a. They are temporary in nature and are planned for replacement by permanent facilities.
- b. They are totally dedicated for tactical military use.
- c. They require further study as to the advantage or manner for inclusion.
- d. They are undergoing test and have not achieved operational status.

DEPARTMENT OF DEFENSE

NARS (North Atlantic Radio System) - A tropo system from Iceland to England. It provides a link from the DEW EAST System to the United Kingdom Microwave System. See Chart 1.

BACKPORCH - A tropo system providing voice and teletype transmission capability in South Vietnam and Thailand. See Chart 2.

BMEWS SUPPORTING COMMUNICATION NETWORK - A system primarily used for transmitting data received by the three radar installations in Alaska, Greenland and the United Kingdom. See Chart 1.

DEW MAIN, DEW EAST, DEW ALEUTIAN, DEWDROP, BLUEGRASS, MID-CANADIAN LINE, PINETREE LINE AND POLEVAVULT - A combination of systems of ionospheric scatter links, tropospheric scatter links, microwave, SSB and leased facilities used for transmitting data received by radar installations in the Northern Area, for SAC positive control, and alternate routing for BMEWS. See Chart 1.

BIG RALLY II - An interim transportable tropo system from Livorno, Italy to Izmir, Turkey connecting the European tropo systems with the Turkey tropo systems. See Chart 3.

Additionally, all dedicated leased circuitry in support of SAC Primary Alert, SAC Telephone Network, the SAC Teletype Network and tactical communications nets supporting NORAD Control and Warning System (416L). See Charts 4, 5, 6 and 7.

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APPENDIX G

DESCRIPTION OF NATIONAL GOVERNMENTAL COMMUNICATIONS

ASSETS WHICH ARE RECOMMENDED FOR CONSIDERATION FOR POSSIBLE LATER INCORPORATION IN THE NCS

The national governmental communications assets described below are recommended for consideration for possible later incorporation in the NCS. See Future Consideration section of Enclosure 2 for charts depicting the assets described in this Appendix. Generally, these assets fit within the broad criteria of NSAM-252, however they are not recommended for inclusion at this time in the NCS for one or more of the following reason::

- a. They require further study as to the advantage or manner for inclusion.

CIVIL AGENCIES

DEPARTMENT OF AGRICULTURE MARKET NEWS SERVICE TELETYPEWRITER SYSTEM - A leased teletypewriter system to provide marketing and commodity distribution information to all qualified users. See Chart 8.

DEPARTMENT OF AGRICULTURE STABILIZATION AND CONSERVATION SERVICE TELETYPEWRITER SYSTEM - A leased teletypewriter network which provides communications required for the administration of the Agricultural Stabilization and Conservation Service. See Chart 9.

DEPARTMENT OF COMMERCE, WEATHER BUREAU HIGH ALTITUDE FACSIMILE NETWORK - A leased facsimile circuit linking together locations in the U. S. for the purpose of transmitting high altitude weather maps required for jet flights within the U. S. and between the U. S. and overseas areas. See Chart 10.

DEPARTMENT OF COMMERCE, WEATHER BUREAU NATIONAL WEATHER FACSIMILE NETWORK - A leased one-way broadcast party line network for transmission of facsimile weather maps. See Chart 11.

DEPARTMENT OF COMMERCE, WEATHER BUREAU INTERNAL RAREP AND WARNING COORDINATION SYSTEM - A leased teletypewriter network used for the purpose of warning the populace of national dangers and disaster. See Chart 12.

FEDERAL RESERVE SYSTEM TELETYPEWRITER NETWORK - A leased teletypewriter network providing record communications for the Federal Reserve System. See Chart 13.

DEPARTMENT OF INTERIOR, BONNEVILLE POWER ADMINISTRATION, RADIO NET - A network of microwave radio stations, point-to-point VHF and UHF radio stations. See Chart 14.

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TREASURY DEPARTMENT, COAST GUARD TELETYPEWRITER AND TELEPHONE NET - A network of government owned and leased facilities providing communication services to Coast Guard districts. See Chart 15.

TREASURY DEPARTMENT, COAST GUARD RADIO STATIONS - A high frequency network providing service to Coast Guard Districts, ocean station vessels and overseas locations. See Chart 16.

JUSTICE DEPARTMENT, FEDERAL BUREAU OF INVESTIGATION RADIO NET - A dedicated radio net for FBI Administration purposes with Net Control Station at Washington, D.C. See Chart 17.

JUSTICE DEPARTMENT, IMMIGRATION AND NATURALIZATION ON SERVICE NETWORK - A dedicated Radio Network serving INS Northeast, Southwest, Southeast and Northwest regions. See Charts 18, 19, 20 and 21.

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, SOCIAL SECURITY ADMINISTRATION TELETYPEWRITER AND DATA NETWORK - A leased teletypewriter and data network comprising 625 stations, 48 relay centers and 7 control centers. See Chart 22.

ATOMIC ENERGY COMMISSION, EMERGENCY RADIO SYSTEMS A, B, C, D, E, F AND G - National emergency networks utilizing high frequency transmission facilities. See Chart 23, 24 and 25.

ATOMIC ENERGY COMMISSION TELETYPEWRITER SYSTEM - A leased teletypewriter net serving AEC tributary locations and feeding into the DCS for transmission of AEC traffic. See Chart 26.

ATOMIC ENERGY COMMISSION, SANDIA CORPORATION TELETYPEWRITER NETWORK - A leased private line teletypewriter network for use by AEC contractor. See Chart 27.

ATOMIC ENERGY COMMISSION TELEPHONE AND TELETYPEWRITER NETWORK - A leased private telephone and teletypewriter multi-point network serving AEC installations.

FCC FIELD ENGINEERING AND MONITORING NET - A leased teletypewriter and radio teletype system linking stations in CONUS, Alaska, Puerto Rico and Hawaii. See Chart 28.

TENNESSEE VALLEY AUTHORITY, LEASED TELEPHONE SYSTEM - A leased telephone intercity net linking TVA offices in three states. See Chart 29.

U.S. INFORMATION AGENCY, INTERNATIONAL BROADCAST SERVICE - A network of microwave and radio teletype circuitry connecting Washington, D. C. to Greenville, S.C. and overseas points. See Chart 30.

U.S. INFORMATION AGENCY INTERNATIONAL PRESS SERVICE WIRELESS - A complex of leased overseas radio stations for broadcast purposes and leased CONUS circuits between Washington, D.C. and San Francisco. See Chart 31.

U.S. INFORMATION AGENCY INTERNATIONAL PRESS SERVICE - A press service utilizing four common carriers and Federal Government operated facilities. See Chart 32.

VETERANS ADMINISTRATION TELETYPE NETWORK - A leased teletype system comprised of six nets containing approximately 260 stations and six net control points. See Chart 33.

DEPARTMENT OF AGRICULTURE, FOREST SERVICE PRIVATE LINE TELETYPEWRITER NETWORK - A leased teletypewriter network providing service from Portland, Oregon Regional Office to points in Washington and Oregon. See Chart 34.

